

Amendments to the Claims

1. (currently amended) ~~An isolated A purified polypeptide having an amino acid sequence comprising the amino acid sequence of SEQ ID NO: 4.~~

2. (currently amended) The ~~isolated purified~~ polypeptide of claim 1 which has an amino acid sequence that consists essentially of the amino acid sequence of SEQ ID NO: 4.

3-14. (canceled)

15. (withdrawn, previously presented) An isolated nucleic acid comprising a nucleotide sequence that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO: 4.

16. (withdrawn) The nucleic acid of claim 15 that comprises the nucleotide sequence of Seq. ID No. 5.

17. (withdrawn, previously presented) The nucleic acid of claim 15 that hybridizes under highly stringent conditions to the complement of the nucleotide sequence of SEQ ID NO: 5.

18-35. (canceled)

36. (withdrawn, previously presented) An isolated antibody that selectively binds to the polypeptide of claim 1.

37. (withdrawn, previously presented) The antibody of claim 36 that selectively binds to the polypeptide of SEQ ID NO: 4.

38. (withdrawn) The antibody of claim 37 which is a monoclonal antibody.

39. (withdrawn) The antibody of claim 37 which is a polyclonal antibody.

40-45. (canceled)

46. (withdrawn, previously presented) A method for inhibiting *Streptococcus uberis* from adhering onto and/or internalizing into bovine mammary epithelial cells comprising exposing the cells to an antibody that selectively binds to the polypeptide of claim 1.

47. (withdrawn, previously presented) The method of claim 46 wherein the antibody selectively binds to the polypeptide of SEQ ID NO: 4.

48. (new) A purified polypeptide having an amino acid sequence consisting of the amino acid sequence of SEQ ID NO: 4.